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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,653	07/08/2003	Eugene M. Chow	A2082	9312
28014	7590 03/30/2005	EXAMINER		
BEVER, HOFFMAN & HARMS, LLP 1432 CONCANNON BLVD BLDG G			MALDONADO, JULIO J	
			ART UNIT	PAPER NUMBER
LIVERMORE	LIVERMORE, CA 64550-6006			
			DATE MAILED: 03/30/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/615,653	CHOW ET AL.				
Office Action Summary	Examiner	Art Unit				
	Julio J. Maldonado	2823				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 December 2004.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-67 is/are pending in the application.</li> <li>4a) Of the above claim(s) 10-16,25-30 and 41-67 is/are withdrawn from consideration.</li> <li>5)  Claim(s) 17-24,31-33 and 35-40 is/are allowed.</li> <li>6)  Claim(s) 1-3,5 and 9 is/are rejected.</li> <li>7)  Claim(s) 4,6-8 and 34 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	_					
I) ☑ Notice of References Cited (PTO-892)  ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	(PTO-413)				
Paper No(s)/Mail Date 20040618, 20040614.		atent Application (PTO-152)				

#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of claims 1-9, 17-24 and 31-40 in the reply filed on 12/15/2004 is acknowledged.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1, 3, 5 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Mathieu et al. (U.S. 2002/0164893 A1).

In reference to claims 1 and 5, Mathieu et al. (Figs.1-12) teach a spring structure formed on a substrate (100) formed of a first material comprising a post (123) formed from a second material and extending from the first surface of the substrate (100), the post having an upper surface that is displaced from the first surface of the substrate by a predetermined distance; a plating electrode (115) formed on the post; a spring metal finger (110, 140) having an anchor portion attached to the upper surface of the post (123) such that the anchor portion is separated from the first surface of the substrate (100) by the predetermined distance, the spring metal finger (110, 140) also having a free portion extending over the substrate, the free portion having opposing first and

second surfaces; and a plated metal layer (150, 170) formed on both of the first and second surfaces of the free portion of the spring metal finger (110, 140); wherein the plated metal layer (150, 170) has a thickness that is smaller than the predetermined distance ([0044] – [0088]).

In reference to claim 3, Mathieu et al. teach wherein the post comprises nickel ([0044]).

In reference to claim 9, Mathieu et al. teach (Fig.14) the spring further comprising a plurality of tips (207) located adjacent to an end of the free portion of the spring metal finger ([0098]).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathieu et al. (U.S. 2002/0164893 A1) as applied to claims 1, 3, 5 and 9 above, and further in view of the following comments.

Mathieu et al. teach wherein the plated metal layer has a thickness that is smaller than a predetermined distance, but fails to teach wherein said predetermined distance is greater than two times larger than the thickness of the plated metal layer.

Notwithstanding, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and

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optimization to choose these particular dimensions because applicant has not disclosed that the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the process would possess utility using another dimension. Indeed, it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); In re Rinehart, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

# Allowable Subject Matter

- 6. Claims 4, 6-8 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claims 17-24, 31-33 and 35-40 are allowed.

#### Conclusion

- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Julio J. Maldonado whose telephone number is (571) 272-1864. The examiner can normally be reached on Monday through Friday.
- 9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on (571) 272-1855. The fax number for this group is 703-872-9306 for before final submissions, 703-872-9306 for after final

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submissions and the customer service number for group 2800 is (703) 306-3329.

Updates can be found at http://www.uspto.gov/web/info/2800.htm.

Julio J. Maldonado Patent Examiner Art Unit 2823

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Julio J. Maldonado March 19, 2005

> George Fourson Primary Examiner